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Sexually Transmitted Infections

Many infections are spread during sex. In this newsletter, we will talk about just a few of them:

- *Chlamydia trachomatis*
- *Neisseria gonorrhoeae*
- *Trichomonas vaginalis*
- *Mycoplasma genitalium*
- *Ureaplasma urealyticum*

Chlamydia and gonorrhea

Chlamydia trachomatis is the second most common sexually transmitted infection in the U.S.¹ *Neisseria gonorrhoeae* is the fourth.¹ They occur in both men and women, but they are of greater concern in women. This is because they can cause pelvic inflammatory disease (PID). And pregnant women can pass the infection to their babies during delivery. Their babies can then get a lung or eye infection.

Most people who are infected don't have any symptoms. This means the infections are usually spread unknowingly. The first sign of it could be PID. Fortunately, both of these infections respond well to treatment. So the key is to find out about the infection before complications develop.

Screening guidelines

There are several organizations that recommend screening. People who should be screened are summarized below.²⁻⁴

Chlamydia	Gonorrhea
Women with symptoms	Women with symptoms
Sex partners of infected people (with or without symptoms)	Sex partners of infected people (with or without symptoms)
All sexually active women ≤25 years of age (screen every year)	Women at high risk
Women >25 years of age who are at high risk	Pregnant women at high risk
All pregnant women	<ul style="list-style-type: none"> • During the first prenatal visit • Again during the third trimester
<ul style="list-style-type: none"> • During the first prenatal visit • During the third trimester if ≤25 years and at increased risk 	



How common are sexually transmitted infections?

There are about 20 million new infections every year.¹ Here are the data for the more common ones¹:

STI	Number of Cases
HPV	14.1 million
Chlamydia	2.9 million
Trichomoniasis	1.1 million
Gonorrhea	820,000
Genital herpes	776,000
Syphilis	55,400
HIV/AIDS	41,400
Hepatitis B	19,000

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Doctors should consider chlamydia screening for young men who go to adolescent clinics and STI clinics.²

Experts think patients should be tested again 3 months after treatment.² This is because reinfection is common.

Who's at risk?

Women at high risk are described below.²⁻⁴

Chlamydia

- Women and teens attending STI, family-planning, or prenatal clinics
- Women with a previously diagnosed STI
- Women in high-prevalence settings
- Women undergoing elective abortion
- Women residing in detention facilities
- Women with new or multiple sex partners
- Women with inconsistent or incorrect use of barrier protection
- Women being evaluated for infertility

Gonorrhea

- Sexually active women ≤ 25 years of age with 2 or more sex partners in the past year
- Women with a previously diagnosed STI
- Pregnant women in high-prevalence settings
- Commercial sex workers
- Women with a history of repeated episodes of gonorrhea
- Intravenous drug users

Trichomoniasis

Trichomonas vaginalis is a protozoan parasite. Many people have no signs of the infection. But infection can cause urethritis or painful urination in men. It can cause cervicitis, urethritis, and vaginitis in women. It's important to diagnose this STI even when there are no signs of it. This is because it can cause complications during pregnancy. It can also cause women to be more susceptible to getting an HIV infection.

A wet mount is often done to diagnose the infection. But this method misses 30% to 50% of the cases.² Molecular methods such as TMA are more sensitive. They can detect about 99% of the cases.⁶

Additional Information

- Centers for Disease Control and Prevention. Sexually Transmitted Diseases (STDs). [cdc.gov/sTd/default.htm](https://www.cdc.gov/sTd/default.htm)
- U.S. Preventive Services Task Force: [uspreventiveservices.org/](https://www.uspreventiveservices.org/)
 - Behavioral counseling for prevention
 - Screening recommendations
 - Affordable Care Act coverage
- Infectious Disease Society of America: [idsociety.org/Index.aspx](https://www.idsociety.org/Index.aspx)

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Who should be tested?

Testing should be considered for women who have symptoms.² Women at high risk might also be tested.² Because there is a high rate of reinfection, testing women 3 months after treatment can be considered.² The benefit of this, though, has not been fully evaluated yet.

Mycoplasma and *Ureaplasma*

M genitalium and *U urealyticum* are common in the urogenital tract of sexually active people. Most of these people don't have an infection. But under the right conditions, both organisms can cause infection. Urethritis is the most common type of the infections they cause. Others include cervicitis, bacterial vaginosis, and PID. Consider testing for these 2 organisms in symptomatic patients who²:

- Test negative for the more common causes of the infection (eg, gonorrhea and chlamydia)
- Did not respond to the initial therapy

These organisms are hard to grow in culture, but molecular methods such as PCR can be used for testing.

References

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3. US Preventive Services Task Force. Screening for gonorrhea. <http://www.uspreventiveservicestaskforce.org/uspstf/uspsgono.htm>. Accessed March 5, 2014.
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5. Anderson MR, Klink K, Cohrssen A. Evaluation of vaginal complaints. *JAMA*. 2004;291:1368-1379.
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